

## REMARKS/ARGUMENTS

The Office action dated September 18, 2009 has been received and carefully considered. By this amendment, claims 1, 4-5, 7, 9-10, 12, and 17 have been amended, claims 3 and 8 were canceled, and no new claims have been added. After entry of this Amendment, claims 1-2, 4-7, and 9-20 will be pending. In view of these amendments and the following remarks, Applicant respectfully requests reconsideration.

### 35 USC §103

The Office rejected **claims 1-2, and 17-18** as being obvious over Kooy et al. (U.S. Pat. No. 4,995,234) or Brundige (U.S. Pat. No. 4,456,459) in view of Johnson (U.S. Pat. No. 5,457,951). The applicant respectfully disagrees, especially in view of the amendments herein.

First, and with respect to Brundige it should be noted that amended claims 1 and 17 are drawn to a regasification plant, which is clearly neither taught, nor suggested by Brundige. On the contrary, Brundige is concerned with flashing of a natural gas stream that is produced by an upstream liquefaction unit. Thus, it should also be appreciated that Brundige fails to teach or suggest heated natural gas, let heating to produce a vapor portion of natural gas. A combination with Johnson fails to remedy these defects. Moreover, Brundige and Johnson are devoid of any teaching with respect to a demethanizer, let alone a demethanizer that receives the vapor and liquid streams.

Second, with respect to Kooy et al. the applicant agrees with the examiner that Kooy teaches expansion of a warmed natural gas stream in a turbine to generate electric power. However, it should be noted that Kooy's configuration requires use of the entire LNG stream to so satisfy the refrigeration requirements in the associated CO<sub>2</sub> cycle. Thus, Kooy also fails to provide any motivation or expectation of success to use a second portion the LNG in any manner other than the first (*i.e.*, use as refrigerant in the associated CO<sub>2</sub> cycle). Moreover, the claims also expressly require that the heated vapor portion has a temperature of at least 125 °F and a pressure of at least 1450 psig, which is contrary to both configurations. Still further, and as noted above, Kooy is also entirely silent on the issue of a demethanizer. Indeed, as Kooy expands the vaporized gas to pipeline pressure (which is typically substantially above normal

operating pressure of a demethanizer), Kooy further teaches away from the subject matter as presently claimed.

Third, it is noted that amended claim 17 expressly requires that a lean liquefied natural gas must be produced from the heated liquefied natural gas that is then compressed using power produced by expansion of the heated liquefied natural gas. There is absolutely nothing in Kooy or Brundige that would suggest formation and use of a lean gas as presently claimed.

With respect to Johnson, it is noted that while Johnson indeed teaches use of LNG as a refrigerant for a secondary heat exchange fluid that is thermally coupled to a combined cycle power plant, Johnson's configuration is limited to gasification of LNG for generation of fuel in a gas turbine. However, the quantities for such regasification are not comparable to those in a regasification plant as presently claimed. Therefore, in view of the amendments and above arguments, the rejection of claims 1-2, and 17-18 as being obvious over Kooy et al. or Brundige in view of Johnson should be withdrawn.

The Office rejected **claims 3-6, 8-12, 16, and 19-20** as being obvious over Kooy et al. or Brundige in view of Johnson and further view of Shu et al. (U.S. Pat. No. 6,125,653). The applicant respectfully disagrees, especially in view of the amendments herein.

With respect to the combination of Brundige/Kooy and Johnson, the same considerations and defects as pointed out above apply and are not reiterated here. Shu et al. fail to remedy these defects. Indeed, it should be noted that Shu teaches configurations and methods of natural gas liquefaction, which is contrary to the inventive subject matter. Consequently, in view of the above arguments and amendments, the rejection of claims 3-6, 8-12, 16, and 19-20 as being obvious over Kooy et al. or Brundige in view of Johnson and further view of Shu et al. should be withdrawn.

The Office rejected **claims 1-4, 8-12, and 16-19** as being obvious over Rambo et al (U.S. Pat. No. 5,114,451) in view of Johnson. The applicant respectfully disagrees, especially in view of the amendments herein.

As amended herein, all claims expressly require that the heated first vapor portion has a temperature of at least 125 °F and a pressure of at least 1450 psig. These elements are neither

taught nor suggested in the references, alone or in combination. Indeed, using such high pressure in Rambo would be highly ineffective as high pressure stream 23 would require depressurization in 11, thus wasting all compression energy for that stream and generating undesirable degrees of refrigeration. On the other hand, there is absolutely no reasons for Johnson et al. to generate a high-pressure high-temperature natural gas stream as the gas is used as fuel. Still further, it should be appreciated that Johnson fails to provide significantly heated gasified LNG at the specified temperature and pressure. Indeed, Johnson's heated gas has fuel header pressure at a temperature of about 45 °F, which is entirely unsatisfactory for the intended purpose. Therefore, in view of the amendments and arguments, the rejection of claims 1-4, 8-12, and 16-19 as being obvious over Rambo et al. in view of Johnson should be withdrawn.

The Office rejected **claims 5-7, 13-15, and 20** as being obvious over Rambo et al. and Johnson in view of Shu et al. The applicant respectfully disagrees, especially in view of the amendments herein.

With respect to the combination of Rambo and Johnson, the same considerations and defects as pointed out above apply and are not reiterated here. Shu et al. fail to remedy these defects. Thus, the rejection of claims 5-7, 13-15, and 20 as being obvious over Rambo in view of Johnson and further view of Shu et al. should be withdrawn.

### **Double Patenting**

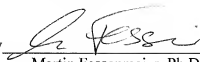
The Office rejected **claims 1-2, and 17-18** under the doctrine of obviousness-type double patenting over claims 10 and 19 of U.S. Pat. No. 7,574,856. The applicant respectfully disagrees in view of the amendments herein. However, should this rejection be the only remaining issue in prosecution, the applicant will file a terminal disclaimer to proceed the matter to issuance.

**Request For Allowance**

Claims 1-20 are pending in this application. The applicant requests allowance of all pending claims.

Respectfully submitted,  
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